

THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Petitions for Exemption from the Zoning
Code of Haverhill, Massachusetts
Pursuant to Mass. Gen. L. c. 40A § 3.

D.T.E. 04-66
D.T.E. 04-81

INITIAL BRIEF OF NEW ENGLAND POWER COMPANY AND
MASSACHUSETTS ELECTRIC COMPANY

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I. INTRODUCTION

In the captioned consolidated dockets, New England Power Company (“NEP”) and Massachusetts Electric Company (“MEC, and together, “the Companies”) each seek comprehensive exemptions from the operation of the City of Haverhill (Massachusetts) Zoning Code for proposed transmission and distribution substation expansions projects (“Transmission Project” and “Distribution Project”), respectively, at 48 Cross Road in Haverhill, Massachusetts. On August 13, 2004, pursuant to G.L. c. 40A § 3, NEP petitioned the Department of Telecommunications and Energy (“Department”) for its comprehensive exemptions.¹ On August 23, 2004, MEC petitioned the Department for its comprehensive exemptions pursuant to the same statutory provision. In addition, on August 23, 2004, the Companies jointly moved that the Department consolidate the evidentiary hearings on their respective Petitions. In the interest of administrative

¹ With its Petition, NEP also filed a Motion for a Protective Order, requesting that the Department refrain from releasing to the public certain Critical Energy Infrastructure Information (“CEII”, and as defined by the Federal Energy Regulatory Commission) deemed pertinent to the proceeding. That Motion is still pending before the Department. The attorney for ISO-NE, the Limited Participant in the consolidated proceedings, executed a Non-Disclosure Agreement with NEP and was thus accorded access to the CEII by NEP.

economy and efficiency, the Department granted the Motion to Consolidate on September 13, 2004.

On October 13, 2004, ISO New England (“ISO-NE”) petitioned the Department to participate as a Limited Participant. In support of its Petition, ISO-NE explained that because it is responsible for the reliability of electric supply and transmission in the North Shore area of Boston and because it is responsible for administration of competitive and efficient wholesale markets in New England, its interest in the matter could not be adequately addressed or represented by any other party. On October 19, 2004, the Department granted ISO-NE’s request to intervene as a Limited Participant.

The Department held a public hearing in the City of Haverhill on October 6, 2004. No members of the public appeared at the hearing on the proposed Transmission and Distribution Projects. On December 9 and 10, 2004, the Department held consolidated evidentiary hearings in Boston, Massachusetts. Seven witnesses testified on the issues of (1) the need for the Transmission Project and (2) the need for the Distribution Project, (3) associated environmental matters, as well as (4) construction and (5) engineering issues over the two-day period. ISO-NE attended the two days of hearings as a Limited Participant.

II. GENERAL BACKGROUND

The Transmission and Distribution Projects are proposed for the same 39-acre parcel at 48 Cross Road in Haverhill. The parcel has been the site of substation operations for at least 50 years². NEP is the fee owner of the property, which is located in an RH High Density Residential District. (NEP – 1, Att. C, NEP – 1 Att. D, NEP –

² Engineering and Design drawings in the Companies records indicate the substation was in place in the 1950s. See Attachment A.

DM – 1 at 4, line 18, MEC – 1, Att. C, MEC – 1 Att. D, MEC – DM – 1 at 4, line 15)

The use of land for an electric substation requires a Special Permit in an RH High Density Residential District.

NEP proposes to construct, maintain and operate additional transmission substation facilities on a portion of the property located on the southerly side of Cross Road. (NEP – 1 at ¶ 4) MEC proposes to construct, operate and maintain additional distribution level electric substation facilities in a different area of the same parcel.

(MEC – 1 at ¶ 3) If the Companies receive their requested comprehensive exemptions from the Department, NEP will grant MEC an easement within NEP’s parcel to be used for MEC’s Distribution Project. (MEC – 1 at ¶ 4)

The purpose of NEP’s proposed Transmission Project is to improve its transmission system by increasing generation import capability in the North Shore region of Massachusetts. (NEP – 1 at ¶ 3; Tr. at 70 lines 4 - 21) In addition to removing some facilities and relocating others, NEP proposes to add three 345/115kV transformers, a fire wall between certain transformers, a 115/23kv transformer, a 120/208 V station service padmount transformer, a 120/208 V emergency generator, a 345kV GIS building, two terminal structures, a new 345 kV structure for a new 394 N tap, CCVTs and Wave traps for 115 kV and 345 kV lines, GIS piping and gas to air bushings, 345 – 115 kV Control Building, two 115 kV bays, one new 115 kV breaker, three new 115kV transmission structures and riser structures for two transformers. (DTE 1 – T – 5)

The purpose of MEC’s proposed Distribution Project is to address load growth and reliability issues that it identified in a study titled “Haverhill Area Distribution Study Merrimack Valley”. (MEC – 1 at ¶ 3, Tr. at 10 lines 3 – 15, RR – 1) MEC proposes to

add two 115/13.2kV transformers, two riser structures with terminations and disconnect switches, one control house, two 15 kV buses and support structures, fourteen 15 kV breakers and associated disconnect switches, twenty-four voltage regulators and associated disconnect switches and two 2-stage capacitor banks with vacuum switches for second stage. (DTE 1 – D – 6)

The Companies are requesting, pursuant Mass. Gen. Laws ch. 40A, § 3, to be exempted from operation of the Zoning Code in connection with the construction and use of the Transmission and Distribution Projects, to the extent the Code may be applicable. (NEP – 1 at 10 and MEC – 1 at 13)

III. ARGUMENT

A. The Companies Are Public Service Corporations.

To satisfy the requirements of Mass. Gen. L. c. 40A, § 3, the Companies must first demonstrate that they are public service corporations.³ The Department has found on numerous occasions that NEP is a Massachusetts corporation authorized to transmit electricity, an electric company as described in Chapter 164 of the General Laws, and a public service corporation. See, e.g., *New England Power*, D.P.U. 92-255 at 2 (1994); *New England Power*, EFSB 97-3 at 76 (1998) and *New England Power*, D.T.E. 04-4 at 8

³ In pertinent part c. 40A, § 3 states “Lands or structures used, or to be used by a **public service corporation** may be exempted in particular respects from the operation of a zoning ordinance or by-law if, upon petition of the corporation, the department of telecommunications and energy shall, after notice given pursuant to section eleven and public hearing in the town or city, determine the exemptions required and find that the present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public; provided however, that if lands or structures used or to be used by a public service corporation are located in more than one municipality such lands or structures may be exempted in particular respects from the operation of any zoning ordinance or by-law if, upon petition of the corporation, the department of telecommunications and energy shall after notice to all affected communities and public hearing in one of said municipalities, determine the exemptions required and find that the present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public.” [emphasis added]

(2004). Accordingly, NEP meets the statutory criteria for petitioning for a zoning exemption. Likewise, the Department has found on numerous occasions that MEC is a Massachusetts corporation authorized to transmit electricity, an electric company as described in Chapter 164 of the General Laws, and a public service corporation. See, e.g., *Massachusetts Electric Company*, DPU 92-232 at 17 (1994); *Massachusetts Electric Company*, DTE 03-130 at 15 (2004). Therefore, MEC also meets the statutory criteria for petitioning for a zoning exemption.

B. Comprehensive Exemptions From The Zoning Code Of The City of Haverhill Is Necessary For Both NEP And MEC.

1. Comprehensive Exemptions

The Department will allow comprehensive zoning relief under Mass. Gen. L. c. 40A, § 3 “where numerous individual exemptions are required or where the issuance of a comprehensive exemption could avoid substantial public harm by serving to prevent delay in the construction and operation of the proposed use.” *Commonwealth Electric Company*, D.T.E. 03-7 at 33, (2003) (“*ComElec*”); see also *Tennessee Gas Pipeline Company*, D.T.E. 01-57 at 11 (2002) (“*Tennessee Gas*”); *Massachusetts Electric Company*, D.T.E. 01-77 at 30-31 (2002) (“*MassElectric*”). A comprehensive zoning exemption is appropriate where, in the case of numerous required exemptions, the proposed construction is time-sensitive or of critical importance to the petitioner’s serving its customers in a satisfactory manner pending the completion of the proposed project. See *Tennessee Gas* at 11. Finally, the Department will allow comprehensive exemptions warranted by the public convenience and necessity, and where it is critical to the public interest that construction of the proposed project begins without needless

delay. See *ComElec* at 34; *Tennessee Gas* at 12; *MassElectric* at 31. In the instant cases, comprehensive zoning relief is necessary for the reasons discussed below.

Numerous exemptions are required for the Transmission and Distribution Projects. NEP's Transmission Project, intended to improve generation import capability in the North Shore region of Massachusetts, merits zoning relief because it would otherwise require numerous individual exemptions under the Zoning Code. (NEP – 1 at 4 – 6, NEP - DM – 1 at 5) Likewise, MEC's Distribution Project, proposed and designed to address load growth and reliability issues, merits zoning relief because it would otherwise require numerous individual exemptions under the Zoning Code. (MEC – 1 at 4 – 5, MEC - DM – 1 at 5) As the record shows, both NEP and MEC have proved that in order to build their respective Projects, the Companies will need, at a minimum, exemptions from each of the following provisions of the Zoning Code:

- Table 1, page 4, which requires a Special Permit to use property for a substation. (NEP – 1, Att. D, NEP – 1 at 4 – 6, NEP - DM – 1 at 5, MEC – 1, Att. D, MEC – 1 at 4 – 5, MEC - DM – 1 at 5)
- §255-13, which prohibits the use of buildings or land for any purpose other than those specifically authorized by the Zoning Code. (Id.)
- §255-28, which requires that all signs comply with the regulations for the erection of signs contained in the Building Code. (Id.)
- §255-53, which limits the expansion of a nonconforming use. (Id.)
- §255-62, which imposes prerequisites, inconsistent with an exemption, on the issuance of a building permit. (Id.)

- §255-63, requiring that prerequisite approvals be recorded in the Essex County Registry of Deeds prior to the Building Inspector issuing a permit. (Id.)
- §255-64, which requires Site Plan Review and establishes its contents. (Id.)
- §255-65, requiring a Certificate of Use and Occupancy. (Id.)
- §255-82, imposing certain environmental performance standards. (Id.)
- Table 1, Table of Use and Parking Regulations, which does not permit fences exceeding six feet in height in an RH district except by special permit. (Id.)

Furthermore, in addition to the provisions of the Zoning Code listed above applicable to both the Transmission Project and the Distribution Project, NEP alone also requires exemption from the two provisions of the Zoning Code listed below:

- §255-85, which places restrictions on the filling of certain lands with more than 500 cubic yards of soil. (Id.)
- Table 2, Table of Dimensional and Density Regulations, which limits the height of any structure in an RH district to 35 feet. (Id.)

2. Special Permits

The Transmission and Distribution Projects require an exemption from the Special Permit requirements of the Zoning Code. The property owned by NEP at 48 Cross Road is located in a RH High Density Residential District as defined by the Zoning Code. (NEP-1, Att. C, NEP – 1, Att. D, NEP – DM – 1 at 4, line 18, MEC – 1, Att. C, MEC – 1, Att. D, MEC – DM – 1 at 4, line 15) The use of land for an electric substation requires a Special Permit in an RH High Density Residential District. (Id.) Therefore, absent an exemption, NEP and MEC would each need to apply for and obtain a Special Permit to construct their respective Projects.

A primary reason that the Companies are seeking comprehensive exemptions rather than applying for Special Permits from the local zoning board is predicated on the Department's previous order issued on July 6, 1995 (DPU 92-280). It granted a zoning exemption for substation construction on the parcel that is the subject of the instant proceedings. (DTE 2 – B – 5) To maintain consistency in permitting, the Companies again are seeking the Department's grant of zoning exemptions for the proposed expansion work. (Id.)

A second reason for the Companies to seek zoning exemptions is that securing a Special Permit can be time consuming. (NEP – DM – 1 at 4, line 21, MEC – DM – 1 at 4, line 19) Special Permits are generally subject to appeal before the Land Court, Superior Court, Housing Court or District Court. Because of the uncertainties associated with appeals, the potential time delays associated with an appeal would virtually assure that NEP and/or MEC could not construct the Projects according to schedule.

Finally, for projects such as these that would also conflict with other provisions of the Zoning Code, securing a Special Permit would not eliminate the need for variances from those other provisions. (NEP – 1, Att. D, MEC – 1, Att. D) Variances, like Special Permits, are generally subject to appeal before the Land Court, Superior Court, Housing Court or District Court and any appeal of a variance could impede construction and implementation of the Projects.

3. Variances

The Projects would require variances from numerous other provisions of the Zoning Code unless exempted from them. There are numerous other provisions of the

Zoning Code from which the Companies would need to seek a variance unless granted an exemption from the Zoning Code by the Department.

- Because a substation is not a permitted use in a RH High Density Residential District, both Companies would need a variance from §255-13, which prohibits the use of buildings or land for any purpose other than those specifically authorized by the Zoning Code. (NEP – 1, Att. D, NEP – 1 at 4 – 6, NEP - DM – 1 at 5, MEC – 1, Att. D, MEC – 1 at 4 – 5, MEC - DM – 1 at 5)
- Because both Companies place industry standard accident prevention signs at all of their substations, both Companies would need a variance since these signs conflict with the requirements of §255-28. (Id.)
- Because the NEP substation as situated presently at Ward Hill is authorized by virtue of a previous DPU exemption, both Companies would need a variance from §255-53, which limits the expansion of a nonconforming use. (NEP – 1, Att. E, MEC – 1, Att. E)
- Because provisions of the Zoning Code aimed at its administration and enforcement do not contemplate construction of substations or construction pursuant to a zoning exemption, both Companies would need a variance from §255-62, which imposes prerequisites on the issuance of a Building Permit. (NEP – 1 at 4 – 6, NEP - DM – 1 at 5, MEC – 1 at 4 – 5, MEC - DM – 1 at 5)
- Because they will not obtain the specific approvals described in §255-63, both Companies would need a variance from the requirement that

prerequisite approvals be recorded in the Essex County Registry of Deeds prior to the Building Inspector issuing a permit. (Id.)

- Because Site Plan Review is a separate proceeding before the City of Haverhill Planning Board and could delay the Projects both Companies would need a variance from 255-64, which requires Site Plan Review and establishes its contents. (Id.)
- Because this section allows the Building Inspector up to 14 days to issue a Certificate of Use and Occupancy and given the aggressive schedule for the Transmission and Distribution Projects, both Companies would need a variance from §255-65, requiring a Certificate of Use and Occupancy. (DTE 2-B-3(d))
- Because of vague language that prevents the precise determination of how the provisions in subsections A, B, E and F may be enforced, both Companies would need a variance from §255-82, imposing certain environmental performance standards. (DTE 2 – B – 3 (e))
- Because standard substation fence is a seven feet high chain link topped with one foot of barbed wire, both Companies would need a Special Permit pursuant to Table 1, Table of Use and Parking Regulations, for fences exceeding six feet in height in an RH district. (NEP – 1 at 4 – 6, NEP - DM – 1 at 5, MEC – 1 at 4 – 5, MEC - DM – 1 at 5)

In addition to foregoing exemptions requested and required by both Companies, NEP alone also requires exemption from §255-85 and Table 2, Table of Dimensional and Density Regulations, as follows:

- Because it is proposing to fill approximately 525 square feet of bordering vegetated wetland, NEP would need a variance from §255-85, which places restrictions on the filling of certain lands with more than 500 cubic yards of soil, (NEP – 1 at 4 – 6, NEP - DM – 1 at 5, DTE 2 – B – 3(a), NEP-FPR-1 at 6, RR-9)
- Because the Transmission Project includes structures as tall as 95 feet or more, NEP would need a variance from Table 2, Table of Dimensional and Density Regulations, which limits the height of any structure in an RH district to 35 feet. (NEP – 1 at 4 – 6, NEP - DM – 1 at 5, DTE 2 – B – 3(a))

C. The Proposed Projects Are Reasonably Necessary For The Convenience And Welfare Of The Public.

In determining whether a proposed use is reasonably necessary for the convenience and welfare of the public, the Department “must balance the interests of the general public against the local interest.” *Dispatch Communications of New England d/b/a Nextel Communications, Inc.*, D.P.U./D.T.E. 95-59-B/95-80/95-112/96-113 at 7 (1998) (“*Nextel*”); *Town of Truro v. Dep’t of Public Utilities*, 365 Mass. 407 (1974). The Department undertakes a “broad and balanced consideration of all aspects of the general public interest...”, *New York Central Railroad v. Dep’t of Public Utilities*, 347 Mass. 586, 592 (1964), examining the effects of the requested exemption “in the state as a whole and upon the territory served by the applicant.” *Id.* In particular, the Department examines: (1) the present or proposed use and any alternatives or alternative sites identified; (2) the need for, or public benefits of, the present or proposed use; and (3) the environmental impacts or any other impacts of the present or proposed use. *Nextel* at 8.

1. The Proposed Transmission and Distribution Projects are Appropriate for the Site.

The site at 48 Cross Road has been used for transmission substation purposes since 1995 and for a distribution substation since the 1950s. (NEP – 1 Att. E, MEC – 1 Att. E); Before settling on the proposed Transmission Project, NEP studied several alternatives to address the identified problem. (Tr. at 65 lines 3 -20, NEP – JWM – 1 at 7) These alternatives included (1) the proposed Transmission project; (2) a new 345 kV line from Ward Hill to the Salem Harbor Switchyard vicinity (a distance of 25.2 miles); (3) a new 345 kV line from Ward Hill to the South Danvers Substation (a distance of 20.3 miles); and (4) a new 345 kV line from Golden Hills to the Salem Harbor Switchyard vicinity (a distance of 13 miles) with a new 345-115 kV substation at Salem Harbor. (Id.) Alternatives 2, 3 and 4 were not only more expensive (costing over \$10 million more than the proposed Transmission Project), but would require physical additions on a more expansive scale (siting and construction of a new transmission line and siting and construction of a new substation versus expansion of the existing Ward Hill site). (Id.) Thus, NEP's proposed solution pending before the Department in D.T. E. 04-66 was chosen over the alternatives based on economics and environmental factors. (Id.)

MEC also considered several other options to provide additional distribution capacity into the Haverhill area. (Tr. at 11 lines 13 – 23, MEC – MJB – 1 at 3) Extending 115kV to other locations in the downtown area such as Bradford #46 and Water Street #31 substations were explored. (MEC – MJB – 1 at 3) These options required building several miles of new 115kV transmission line into the downtown Haverhill area which would require significant permitting. These alternatives would be unlikely to meet the MEC project need date of 2006. (Id.) They would also require the

construction of a new substation in the downtown area, which would also require significant permitting. (Id.) Thus, MEC has determined that building a new 115 kV transmission line and downtown substation would not be the most cost-effective solution. (Id.) Expanding the Ward Hill distribution substation, with its existing 115kV facilities presents the most cost-effective solution. (Id.) Based on the analysis performed in the study, the proposed Distribution Project, which takes advantage of existing facilities provides the most robust solution for meeting Haverhill's expanding needs, in the most cost-effective and expeditious manner, while causing the least amount of impact to the environment and local area customers. (Id.)

2. NEP's Project Is Needed To Improve Its Transmission System By Increasing Generation Import Capability.

The purpose of NEP's proposed Transmission Project is to improve its transmission system by increasing generation import capability in the North Shore region of Massachusetts. (Tr. at 45 lines 11 – 24, NEP – 1 at ¶ 3) The reliability standards for the New England Power Pool and the National Grid USA Transmission Planning Guide place specific requirements on NEP: (1) to design its transmission system so that facility loadings are kept within capabilities and (2) to keep transmission equipment within reasonable range of voltage for foreseeable contingencies, such as the loss of a single element (e.g., a major transmission line). (Tr. at 55 lines 9 – 24, NEP – JWM – 1 at 4) To ensure that the North Shore area transmission system continues to meet these reliability criteria, NEP conducted electrical system studies for the area through the year 2012, documented in the report "Northeast Mass (NEMA)/ Boston Planning Study" dated April 2004. (NEP – JWM – 1 at 5) This study showed that several facilities on the North Shore transmission loop could become loaded above their capabilities, under a variety of

contingency conditions tested. (Id. at 6) Two specific concerns were (1) the loading on the existing Ward Hill 345 – 115 kV transformer for the contingency loss of the two 115 kV lines G-133E and B-154N, due to a fault on either line and a failed 115 kV circuit breaker between the two lines; and (2) the loading on the Golden Hills 345 - 115 kV transformers for the contingency loss of the Ward Hill transformer and the 115 kV line G-133E, due to a fault on either element and a failed 115 kV circuit breaker between the two elements. (Id.) The study showed that any reduction of generation in the North Shore area increased the contingency loading of these elements. (Id.) This also indicated a need to increase the import capability⁴ of the North Shore transmission loop. (Id.) NEP's Transmission Project is needed to address these potential contingency loading on the area's 345-115 kV transformers. (Id.) NEP's obligations to its customers require that it take measures to resolve this matter in a timely and prudent manner. The proposed Transmission Project is the most efficient and economic means of doing so. The public will therefore benefit from improved system reliability if the Transmission Project receives the requested zoning exemptions.

3. MEC's Project Is Needed To Address Load Growth And Reliability Issues.

The purpose of MEC's proposed project is to address load growth and reliability issues that it has identified⁵. (Tr. at 10 lines 3 – 15, RR – 1, MEC – 1 at ¶ 3) The 10-year study spanning 2003-2013 for the Haverhill area electrical distribution and subtransmission system recommends MEC's proposed Distribution Project. (DTE 1-B-7,

⁴ Import capability refers to the ability and capacity of the transmission system to bring power into one area of the transmission system from generation sources located in other areas.

⁵ MEC periodically studies the electric load in the distribution supply areas within its service territory. (MEC – MJB – 1 at 5) These studies determine if capacity additions, equipment upgrades, load transfers or other work is needed to maintain loading on the Company's facilities within equipment capabilities for the foreseeable planning horizon. (Tr. at 10 lines 3 – 15, RR – 1, MEC – 1 at ¶ 3)

Att. A.) The recommendation is based on the finding that the percent loading of all feeders in the Haverhill area will reach or exceed normal capabilities during the period studied. (Id.) The proposed 115/13.2 kV distribution substation is essential to solve all identified loading and feeder design criteria violations for the duration of the study. MEC's obligations to its customers require that it take measures to resolve this matter in a timely and prudent manner. The proposed Project is the most efficient and economic means of doing so.

4. The Impacts Of The Proposed Use To The Local Community Will Be Minimal.

The land use in the vicinity of the Ward Hill Substation is varied. (Tr. at 167 – 168 lines 18 -24, NEP – FPR -1 at 3, MEC – FPR – 1 at 3) To the east is an active railroad and a mixed residential/commercial neighborhood. (Id.) South and west of the substation is electric right-of-way (“ROW”) and open space leading to the Merrimack River. North of the substation is a forested plot, an agricultural field and a natural gas pipeline ROW. (Id.)

(a) Land Use

Land use will remain unaffected by this project. (Id.) About 31,340 square feet will be added to the NEP portion of the substation yard by expanding the north and south fencelines. (Id.) About 7,830 square feet will be added to the MEC portion of the yard by expanding the east and south fencelines. These changes are in keeping with the current use of the site. (Id.) Based on the foregoing facts, the Transmission and Distribution Projects will have minimal impact on land use.

(b) Wetlands / Water Resources

The wetlands were delineated by TRC Environmental Corporation of Lowell, MA. (MEC – FPR -1 at 3) For the MEC Distribution Project, there is no anticipated filling of bordering vegetated wetlands (BVW) or buffer zone. (Id.) There is minor anticipated filling of BVW for NEP’s Transmission Project. (NEP – FPR -1 at 3) Some limited work will occur in buffer zone to BVW and in Riverfront Area. (Id.) Plans for the work have been submitted to the Haverhill Conservation Commission and an Order of Conditions is pending. (Tr. at 169 lines 5 – 21, RR-5) Nearby wetlands will be segregated from the active work zones by use of erosion control barriers. (NEP – FPR -1 at 3) These will be set in place early in the construction process to preclude inadvertent impact to nearby wetland resources. (Id.) Approximately 525 square feet of BVW will be filled by the NEP expansion and will be replicated elsewhere onsite as determined by the Haverhill Conservation Commission. (Id.) Active construction activity involving ground disturbance will be monitored by an environmental scientist. (Id.) Based on the foregoing facts, the Transmission and Distribution Projects will have no impact on water resources.

(c) Visual Resources

The Transmission and Distribution Projects will have minimal impact on visual resources. The area is surrounded by electric utility ROW, forest plots, railroad tracks and a mixed use neighborhood. (Tr. at 175 lines 9 – 24, MEC – FPR – 1 at 5, NEP – FPR – 1 at 5) There is an active railroad line between the substation site and the neighborhood. (Id.) The distance from the nearest residence to the closest NEP substation fenceline is about 300 feet. (Id.) The distance from the nearest residence to

the MEC substation expansion area is farther away, about 430 feet. (Id.) The MEC expansion will be on the south side of the substation. (Id.) It is unlikely that the expanded area will be very visible to the casual observer, but it may be seen from the nearest houses during the leaf-off season. (Id.) A portion of the residential development in the Lone Tree Hill section of Methuen across the Merrimack River will be able to see the site. (Id.) However, the character of the site will remain essentially as it is today---substation with electric and natural gas ROWs. (Id.) Based upon the foregoing facts, the Transmission and Distribution Projects will have minimal impact on visual resources.

(d) Noise Environment

The Transmission and Distribution Projects will have minimal impact on the existing noise environment. An ambient noise survey was conducted to qualify and quantify the existing acoustic environment surrounding the Substation site. (MEC - KMH – 7 at iii, NEP – KMH – 7 at iii) The potential noise emissions from the Substation have been evaluated based on normal operation. (Id.) Based on the evaluation, the increase in the ambient sound levels in the surrounding community due to the operation of the proposed Transmission and Distribution Projects are not expected to result in significant impacts, although noise emissions may be audible at certain times during the day. (Id.) The increase in the future background sound level at the nearest residences is expected to be approximately 1-3 dB during periods of typical noisy background and occasionally as much as 5 dB during periods of quiet background and simultaneous operation of all transformers at the FAFA level. (MEC - KMH – 7 at 19, NEP – KMH – 7 at 19) The increase in the future background sound levels is based on the ambient data collected during the August 4 – 5, 2004, survey. (Id.) Typically, increases in sound

levels of 1-3 dB range from “imperceptible” to “just barely perceptible” and an increase of 5 dB is considered “clearly noticeable” by average listeners. (Id.) Based upon the foregoing facts, the Transmission and Distribution Projects will have minimal impact on the existing noise environment.

(e) Traffic and Access

The Transmission and Distribution Projects will have minimal impact on local traffic and access. For NEP’s Transmission Project, the peak daily traffic is estimated to be 30 vehicles with an average daily traffic of about 20 vehicles per day over the construction period. (RR-3) For MEC’s Distribution Project, the peak daily traffic is estimated to be 10 vehicles with an average daily traffic of 8 vehicles per day over the construction period. (Id.) These numbers are based on a combination of both the workforce commute and delivery trucks. (Id.) Due to the close proximity of the project site to major traffic routes (Route 125, a four-lane highway, and Interstate 495, a six-lane interstate), the use of local roads is limited to a short section of Cross Road and Oxford Street. (Id.) No parking or queuing will be necessary on Cross Road. (Id.) Traffic counts performed by Massachusetts Highway Department in March 2004 indicate that the average daily trips on Route 125 south of the 125 connector are over 16,000 trips per day (Id.) Given the low estimate of construction traffic as compared to the average traffic in the area, the Transmission and Distribution Projects are not expected to effect local traffic. (Id.)

III. CONCLUSION

NEP and MEC have each demonstrated that they are public service corporations, that they require comprehensive exemptions from the Zoning Code of the City of Haverhill to construct and operate the Transmission and Distribution Projects, and that the Transmission and Distribution Projects are necessary for the convenience and welfare of the public. The Transmission and Distribution Projects will serve an important public purpose. The benefits of the Transmission and Distribution Projects for the public vastly outweigh the minimal impacts that may temporarily accompany construction. The Companies therefore respectfully urge the Department to grant the requested comprehensive zoning exemption under Mass. Gen Laws ch. 40A § 3.

Respectfully submitted,

NEW ENGLAND POWER COMPANY
MASSACHUSETTS ELECTRIC COMPANY
By their Attorney,

s/Paige Graening

PAIGE GRAENING
COUNSEL
NEW ENGLAND POWER COMPANY AND
MASSACHUSETTS ELECTRIC COMPANY
25 Research Drive
Westborough, MA 01582
(508) 389-3074